

## ABSTRACT OF THE DISCLOSURE

A signal transmission circuit is formed by a transmitter, a receiver, a transmission line therebetween, and a bias circuit. The transmitter receives an input signal to transmit a signal corresponding to the input signal to the input of the transmission line. A voltage amplitude of the transmitted signal is smaller than a voltage amplitude defined by first and second power supply terminals. The receiver receives the transmitted signal, adjusts a voltage of the received signal in accordance with a bias voltage to generate a voltage adjusted signal, and wave-shapes the voltage adjusted signal to generate an output signal. The bias circuit differentially amplifies the output signal of the receiver and an inverted signal thereof to generate the bias voltage. The bias circuit includes a capacitor charged and discharged in accordance with the bias voltage.